















































Mfg. No. Description

1694547 Wide Body Cart Collector Hitch & Tube Kit

Simplicity

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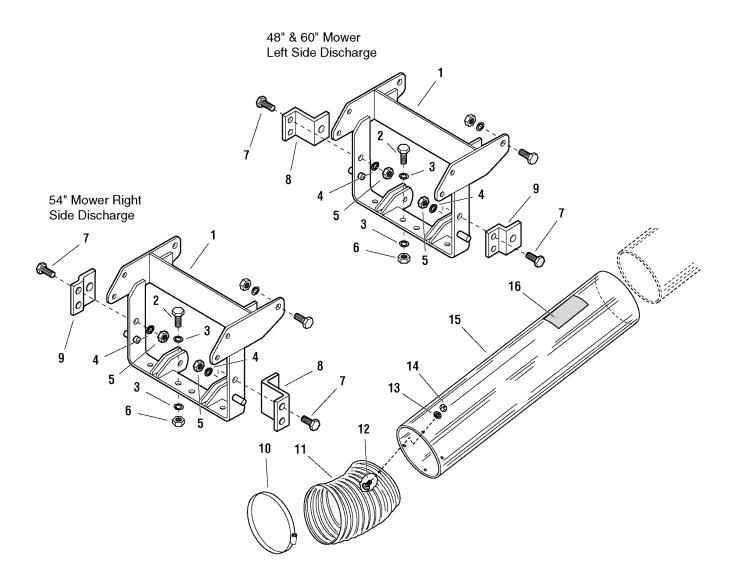




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NOTE: Unless noted otherwise, use the standard hardware torque specification chart.



The above parts group applies to the following Mfg. Nos.:

1694547 - Wide Body Cart Collector Hitch & Tube Kit

Hitch & Tube Group

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|-----------------------------|-----------|------|---|--|--|
| REF NO | PART NO. | QTY. | DESCRIPTION | | |
| 1 | 1720948SM | 1 | HITCH ASSEMBLY | | |
| 2 | 1921176SM | 2 | CAPSCREW, Hex, 1/2-13 x 1-1/4 | | |
| 3 | 1918431SM | 4 | LOCKWASHER, 1/2 | | |
| 4 | 1917373SM | 2 | LOCKWASHER, 5/8 | | |
| 5 | 1915726SM | 2 | NUT, 5/8-11 | | |
| 6 | 1922134SM | 2 | NUT, 1/2-13 | | |
| 7 | 1923151SM | 2 | CAPSCREW, 5/8-11 x 1-1/4 | | |
| 8 | 1721039SM | 1 | BRACKET, Long | | |
| 9 | 1721038SM | 1 | BRACKET, Short | | |
| 10 | 1679896SM | 1 | CLAMP, Hose 6", Band Type | | |
| 11 | 1679895SM | 1 | HOSE, Vac Col, 6 x 12 | | |
| 12 | 1930531SM | 4 | SCREW, Truss Head, Phillips, #10-32 x 1/2 | | |
| 13 | 1910531SM | 8 | WASHER, #10-32 | | |
| 14 | 1928919SM | 1 | NUT, Hex Washer, 1/4-20 | | |
| 15 | 1700773SM | 1 | TUBE & DECAL ASSEMBLY (Includes Ref. No.16) | | |
| 16 | 1675766SM | 1 | DECAL, Cleaning Instructions | | |

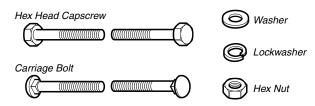
Footnotes

The above parts group applies to the following Mfg. Nos.:

1694547 - Wide Body Cart Collector Hitch & Tube Kit

Hardware Identification & Torque Specifications

Common Hardware Types

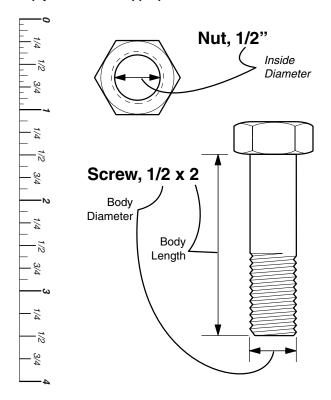


Standard Hardware Sizing

When a washer or nut is identified as 1/2", this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch; if a second number is present it represent the *threads per inch*

When bolt or capscrew is identified as **1/2 - 16 x 2**", this means the *Nominal size*, or *body diameter* is 1/2 inch; the second number represents the *threads per inch* (16 in this example, and the final number is the *body length* of the bolt or screw (in this example 2 inches long).

The guides and ruler furnished below are designed to help you select the appropriate hardware and tools.



Torque Specification Chart

FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)

| Hardware Grade | No Marks SAE Grade 2 | | SAE Grade 5 | | SAE Grade 8 | |
|---------------------|-----------------------|-------|------------------|-------|------------------|---------|
| Size Of Hardware | in/lbs ft/lbs | Nm. | in/lbs ft/lbs | Nm. | in/lbs ft/lbs | Nm. |
| 8-32 | 19 | 2.1 | 30 | 3.4 | 41 | 4.6 |
| 8-36 | 20 | 2.3 | 31 | 3.5 | 43 | 4.9 |
| 10-24 | 27 | 3.1 | 43 | 4.9 | 60 | 6.8 |
| 10-32 | 31 | 3.5 | 49 | 5.5 | 68 | 7.7 |
| 1/4-20 | 66 | 7.6 | 8 | 10.9 | 12 | 16.3 |
| 1/4-28 | 76 | 8.6 | 10 | 13.6 | 14 | 19.0 |
| 5/16-18 | 11 | 15.0 | 17 | 23.1 | 25 | 34.0 |
| 5/16-24 | 12 | 16.3 | 19 | 25.8 | 27 | 34.0 |
| 3/8-16 | 20 | 27.2 | 30 | 40.8 | 45 | 61.2 |
| 3/8-24 | 23 | 31.3 | 35 | 47.6 | 50 | 68.0 |
| 7/16-14 | 30 | 40.8 | 50 | 68.0 | 70 | 95.2 |
| 7/16-20 | 35 | 47.6 | 55 | 74.8 | 80 | 108.8 |
| 1/2-13 | 50 | 68.0 | 75 | 102.0 | 110 | 149.6 |
| 1/2-20 | 55 | 74.8 | 90 | 122.4 | 120 | 163.2 |
| 9/16-12 | 65 | 88.4 | 110 | 149.6 | 150 | 204.0 |
| 9/16-18 | 75 | 102.0 | 120 | 163.2 | 170 | 231.2 |
| 5/8-11 | 90 | 122.4 | 150 | 204.0 | 220 | 299.2 |
| 5/8-18 | 100 | 136 | 180 | 244.8 | 240 | 326.4 |
| 3/4-10 | 160 | 217.6 | 260 | 353.6 | 386 | 525.0 |
| 3/4-16 | 180 | 244.8 | 300 | 408.0 | 420 | 571.2 |
| 7/8-9 | 140 | 190.4 | 400 | 544.0 | 600 | 816.0 |
| 7/8-14 | 155 | 210.8 | 440 | 598.4 | 660 | 897.6 |
| 1-8 | 220 | 299.2 | 580 | 788.8 | 900 | 1,244.0 |
| 1-12 | 240 | 326.4 | 640 | 870.4 | 1,000 | 1,360.0 |

NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- 2. Recommended seating torque values for locknuts:
 - a. for prevailing torque locknuts use 65% of grade 5 torques.
 - b. for flange whizlock nuts and screws use 135% of grade 5 torques.
- 3. Unless otherwise noted on assembly drawings, all torque values must meet this specification.

Wrench & Fastener Size Guide



1/4" Bolt or Nut Wrench—7/16"



5/16" Bolt or Nut Wrench—1/2"



3/8" Bolt or Nut Wrench—9/16"



7/16" Bolt or Nut Wrench (Bolt)—5/8" Wrench (Nut)—11/16"



1/2" Bolt or Nut Wrench—3/4"